



Charles L.A. Terreni Chief Clerk and Administrator South Carolina Public Service Commission Post Office Drawer 11649 Columbia, South Carolina 29211

Re: Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.

Power Plant Performance Report (November 2007)

Docket No. 2006-224-E

Dear Mr. Terreni:

Enclosed are an original and one copy of the Power Plant Performance Report for Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. for the month of November 2007.

Sincerely,

s/ Len S. Anthony

Len S. Anthony Deputy General Counsel – Carolinas

LSA/dhs Enclosures 45612

c: John Flitter (ORS)

The following units had no off-line outages during the month of November:

Brunswick Unit 1 Brunswick Unit 2 Harris Unit 1 Robinson Unit 2 Roxboro Unit 2 Roxboro Unit 3 Mayo Unit 1

### Full Scheduled Outage

- A. <u>Duration:</u> The unit was taken out of service at 23:15 on October 19, and remained offline during the month of November. The unit was offline for 721 hours during November.
- B. <u>Cause:</u> Major Turbine Outage, Boiler Inspections, and Installation of Environmental Modifications
- C. <u>Explanation</u>: The unit was taken out of service for a major turbine outage, and boiler repairs and inspections. Additionally, installation of the flue gas desulfurization system is to be carried out during the outage.
- D. <u>Corrective Action:</u> Planned outage activities were in progress at the end of November.

	Month of November 2007		Twelve Month	Twelve Month Summary		
MDC	938	MW	938	MW	1	
Period Hours	721	HOURS	8,760	HOURS		
Net Generation	698,196	MWH	7,900,199	MWH	2	
Capacity Factor	103.24	%	96.15	%		
Equivalent Availability	99.87	%	93.65	%		
Output Factor	103.24	%	101.59	%		
Heat Rate	10,227	BTU/KWH	10,352	BTU/KWH		
	MWH 	% of Possible	MWH 	% of Possible		
Full Scheduled	0	0.00	326,159	3.97	3	
Partial Scheduled	905	0.13	38,329	0.47	4	
Full Forced	0	0.00	114,389	1.39	5	
Partial Forced	0	0.00	39,441	0.48	6	
Economic Dispatch	0	0.00	0	0.00	7	
Possible MWH	676,298		8,216,880		8	

<sup>\*</sup> See 'Notes for Nuclear Units' filed with the January 2007 report.

<sup>\*\*</sup> Gross of Power Agency

	Month of November 2007		Twelve Month	Twelve Month Summary		
MDC	937	MW	937	MW	1	
Period Hours	721	HOURS	8,760	HOURS		
Net Generation	676,160	MWH	6,990,264	MWH	2	
Capacity Factor	100.09	%	85.16	%		
Equivalent Availability	98.89	%	84.50	%		
Output Factor	100.09	%	99.17	%		
Heat Rate	10,467	BTU/KWH	10,564	BTU/KWH		
	MWH 	% of Possible	MWH 	% of Possible		
Full Scheduled	0	0.00	1,040,570	12.68	3	
Partial Scheduled	7,524	1.11	109,299	1.33	4	
Full Forced	0	0.00	118,968	1.45	5	
Partial Forced	0	0.00	4,886	0.06	6	
Economic Dispatch	0	0.00	0	0.00	7	
Possible MWH	675,577		8,208,120		8	

<sup>\*</sup> See 'Notes for Nuclear Units' filed with the January 2007 report.

<sup>\*\*</sup> Gross of Power Agency

	Month of November 2007		Twelve Month	See Notes*	
MDC	900	MW	900	MW	1
Period Hours	721	HOURS	8,760	HOURS	
Net Generation	667,641	MWH	7,415,573	MWH	2
Capacity Factor	102.89	%	94.06	%	
Equivalent Availability	100.00	%	93.02	%	
Output Factor	102.89	%	100.77	%	
Heat Rate	10,686	BTU/KWH	10,824	BTU/KWH	
	MWH 	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	523,410	6.64	3
Partial Scheduled	0	0.00	1,259	0.02	4
Full Forced	0	0.00	1,320	0.02	5
Partial Forced	0	0.00	66,157	0.84	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	648,900		7,884,000		8

<sup>\*</sup> See 'Notes for Nuclear Units' filed with the January 2007 report.

<sup>\*\*</sup> Gross of Power Agency

Progress En	ergy Carolinas
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# BASE LOAD POWER PLANT PERFORMANCE REPORT Robinson 2

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	Month of November 2007		Twelve Month	See Notes*	
MDC	710	MW	710	MW	1
Period Hours	721	HOURS	8,760	HOURS	
Net Generation	544,248	MWH	5,736,031	MWH	2
Capacity Factor	106.32	%	92.23	%	
Equivalent Availability	100.00	%	88.58	%	
Output Factor	106.32	%	103.23	%	
Heat Rate	10,562	BTU/KWH	10,813	BTU/KWH	
	MWH 	% of Possible	MWH 	% of Possible	
Full Scheduled	0	0.00	628,586	10.11	3
Partial Scheduled	0	0.00	16,784	0.27	4
Full Forced	0	0.00	34,707	0.56	5
Partial Forced	0	0.00	24,164	0.39	6
Economic Dispatch	0	0.00	9,775	0.16	7
Possible MWH	511,910		6,219,600		8

<sup>\*</sup> See 'Notes for Nuclear Units' filed with the January 2007 report.

	Month of November 2007		Twelve Month	Twelve Month Summary		
MDC	741	MW	741	MW	1	
Period Hours	721	HOURS	8,760	HOURS		
Net Generation	398,174	MWH	4,672,050	MWH	2	
Capacity Factor	74.53	%	71.98	%		
Equivalent Availability	100.00	%	91.43	%		
Output Factor	74.53	%	76.47	%		
Heat Rate	10,389	BTU/KWH	10,367	BTU/KWH		
	MWH 	% of Possible	MWH 	% of Possible		
Full Scheduled	0	0.00	346,022	5.33	3	
Partial Scheduled	0	0.00	134,545	2.07	4	
Full Forced	0	0.00	35,457	0.55	5	
Partial Forced	0	0.00	40,519	0.62	6	
Economic Dispatch	136,087	25.47	1,265,544	19.49	7	
Possible MWH	534,261		6,494,080		8	

<sup>\*</sup> See 'Notes for Fossil Units' filed with the January 2007 report.

<sup>\*\*</sup> Gross of Power Agency

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	Month of November 2007		Twelve Month	See Notes*	
MDC	639	MW	642	MW	1
Period Hours	721	HOURS	8,760	HOURS	
Net Generation	443,547	MWH	4,448,495	MWH	2
Capacity Factor	96.27	%	79.15	%	
Equivalent Availability	100.00	%	85.72	%	
Output Factor	96.27	%	90.67	%	
Heat Rate	8,857	BTU/KWH	9,202	BTU/KWH	
	MWH 	% of Possible	MWH 	% of Possible	
Full Scheduled	0	0.00	546,419	9.72	3
Partial Scheduled	0	0.00	156,916	2.79	4
Full Forced	0	0.00	80,589	1.43	5
Partial Forced	0	0.00	15,555	0.28	6
Economic Dispatch	17,172	3.73	389,439	6.93	7
Possible MWH	460,719		5,620,270		8

<sup>\*</sup> See 'Notes for Fossil Units' filed with the January 2007 report.

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	Month of November 2007		Twelve Month	Twelve Month Summary		
MDC	705	MW	705	MW	1	
Period Hours	721	HOURS	8,760	HOURS		
Net Generation	393,029	MWH	4,542,386	MWH	2	
Capacity Factor	77.32	%	73.53	%		
Equivalent Availability	99.86	%	92.88	%		
Output Factor	77.32	%	77.13	%		
Heat Rate	11,040	BTU/KWH	10,999	BTU/KWH		
	MWH 	% of Possible	MWH 	% of Possible		
Full Scheduled	0	0.00	160,016	2.59	3	
Partial Scheduled	0	0.00	68,296	1.11	4	
Full Forced	0	0.00	102,613	1.66	5	
Partial Forced	720	0.14	109,114	1.77	6	
Economic Dispatch	114,556	22.54	1,194,864	19.34	7	
Possible MWH	508,305		6,177,260		8	

<sup>\*</sup> See 'Notes for Fossil Units' filed with the January 2007 report.

	Month of November 2007		Twelve Month	Twelve Month Summary		
MDC	698	MW	698	MW	1	
Period Hours	721	HOURS	8,760	HOURS		
Net Generation	-2,271	MWH	3,855,379	MWH	2	
Capacity Factor	-0.45	%	63.04	%		
Equivalent Availability	0.00	%	86.03	%		
Output Factor	#DIV/0!	%	71.89	%		
Heat Rate	0	BTU/KWH	10,482	BTU/KWH		
	MWH 	% of Possible	MWH 	% of Possible		
Full Scheduled	503,258	100.00	744,534	12.17	3	
Partial Scheduled	0	0.00	84,955	1.39	4	
Full Forced	0	0.00	0	0.00	5	
Partial Forced	0	0.00	24,527	0.40	6	
Economic Dispatch	0	0.00	1,404,303	22.96	7	
Possible MWH	503,258		6,115,940		8	

<sup>\*</sup> See 'Notes for Fossil Units' filed with the January 2007 report.

<sup>\*\*</sup> Gross of Power Agency

Plant	Unit	Current MW Rating	January 2006 - December 2006	November 2007	January 2007 - November 2007
T IGHT	O.I.I.	y	2000111201 2000	110101111011 2007	110101111011 2001
Asheville	1	197	72.44	78.37	62.23
Asheville	2	186	60.37	73.24	72.44
Cape Fear	5	144	72.32	80.19	79.70
Cape Fear	6	173	65.99	67.21	72.75
Lee	1	77	47.56	70.41	62.09
Lee	2	77	43.52	61.80	63.40
Lee	3	252	60.06	36.34	65.59
Mayo	1	741	67.04	74.53	72.10
Robinson	1	180	78.19	90.61	73.21
Roxboro	1	383	77.79	78.89	78.02
Roxboro	2	639	81.26	96.27	78.84
Roxboro	3	705	59.60	77.32	74.98
Roxboro	4	698	65.20	0.00	63.46
Sutton	1	97	44.30	52.83	57.29
Sutton	2	106	46.43	60.14	64.05
Sutton	3	403	54.54	60.31	55.66
Weatherspoon	1	49	36.15	43.72	54.66
Weatherspoon	2	49	37.40	48.59	56.81
Weatherspoon	3	79	50.52	68.22	69.25
Fossil System Total		5,235	65.25	63.95	69.86
Brunswick	1	938	87.51	103.24	95.50
Brunswick	2	937	89.68	100.09	85.62
Harris	1	900	89.16	102.89	93.20
Robinson Nuclear	2	710	103.59	106.32	90.90
Nuclear System Total		3,485	91.80	102.93	91.31
Total System		8,720	75.80	79.53	78.43

### Amended SC Fuel Rule Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor of  $\geq$  92.5% during the 12 month period under review. For the test period April 1, 2007 through November 30, 2007, actual period to date performance is summarized below:

Period to Date: April 1, 2007 to November 30, 2007

#### Nuclear System Capacity Factor Calculation (Based on net generation)

A Nuclear system actual generation for SCPSC test period	$A = \frac{1}{2}$	18,426,020 MWH
B. Total number of hours during SCPSC test period	B =	5,857 hours
C. Nuclear system MDC during SCPSC test period (see page 2)	C =	3,485 MW
D. Reasonable nuclear system reductions (see page 2)	D=	2,226,063 MWH
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A. SC Fuel Case nuclear system capacity factor: [(A + D) / (B + C)] \* 100 = 101.2%

#### NOTE:

If Line Item E > 92.5%, presumption of utility's minimum cost of operation. If Line Item E < 92.5%, utility has burden of proof of reasonable operations.

### Amended SC Fuel Rule Nuclear System Capacity Factor Calculation Reasonable Nuclear System Reductions

Period to Date: April 1, 2007 to November 30, 2007

Nuclear Unit Name and Designation	BNP Unit # 1	BNP Unit # 2	HNP Unit # 1	RNP Unit # 2	Nuclear System
Unit MDC	938 MW	937 MW	900 MW	710 MW	3,485 MW
Reasonable refueling otuage time (MWH)	0	392,521	480,210	628,587	
Reasonable maintenance, repair, and equipment replacement outage time (MWH)	475,774	19,991	68,740	34,707	
Reasonable coast down power reductions (MWH)	0	0	0	6,195	
Reasonable power ascension power reductions (MWH)	31,774	32,350	0	22,063	
Prudent NRC required testing outages (MWH)	4,225	14,274	456	0	
SCPSC identified outages not directly under utility control (MWH)	0	0	0	0	
Acts of Nature reductions (MWH)	0	0	0	14,196	
Reasonable nuclear reduction due to low system load (MWH)	0	0	0	0	
Unit total excluded MWH	511,773	459,136	549,406	705,748	
Total reasonable outage time exclusions [carry to Page 1, Line D]					2,226,063